

REMARKS

In support of allowance, applicants have the following comments. Claims 1-5 and 7 remain pending in this application.

I. Terminal Disclaimer

Applicant has filed a terminal disclaimer as to U.S. Serial No. 10/097,717. It should be noted that U.S. Application Serial No. 11/276,624 was filed on March 8, 2006, which is a divisional of the above U.S. Serial No. 10/097,717. More specifically, U.S. Serial No. 10/097,717, now U.S. Patent No. 7,137,426, is directed to an apparatus while divisional U.S. Serial No. 11/276,624 is directed to a method for printing. Divisional U.S. Serial No. 11/276,624 has been amended, at the request of the examiner in that case, to place the application in condition for allowance where claim 1 incorporates all of the limitations of an allowed dependent claim and all intervening claims.

While U.S. Patent No. 7,137,426 and divisional U.S. Serial No. 11/276,624 state that any material, such as film, can be employed for the carrier sheet, they do not specifically call out that the carrier sheet can be made of an *ionomer* film, such as *Surlyn*. As disclosed in the present application, Surlyn has been found to be an unusually good material for the carrier sheet because of its ability to conform and stretch about more than one side of an object to be printed, such as an object with sides that are not coplanar with a top surface. Therefore, claim 1 of the present application has now been amended herein to be very similar in scope as allowable claim 1 in divisional U.S. Serial No. 11/276,624 and claim 1 in U.S. Patent No. 7,137,426 but it specifically also requires that the carrier sheet be made of a Surlyn material to achieve the above quality results

for three-dimensional printing with the limitations of claim 6 being incorporated into base claim 1 as well. The chemical composition of Surlyn is set forth in claim 1 of the present application. Paragraphs 26-27 and the figures of the instant applications supports this amendment. Therefore, applicant submits that, in similar fashion to U.S. Patent No. 7,137,426 and U.S. Serial No. 11/276,624, claim 1 in the present application is also allowable over the cited prior art.

In view of the foregoing, applicant has also submitted a terminal disclaimer herein for U.S. Serial No. 11/276,624, with the required fee, to supplement the terminal disclaimer of U.S. Serial No. 10/097,717 (now U.S. Patent No. 7,137,426) previously entered in this application.

II. Rejection of Claims Under Section 103

The office action states that claims 1-7 are rejected based on the citation of a number of different combinations of cited prior art.

A. Neri et al. (U.S. 2002/0131062), Usuki et al. and Rees

Claims 1 and 7 stand rejected based on the citation of Neri et al. (U.S. 2002/0131062), Usuki et al. and Rees in combination under Section 103. Neri et al. (U.S. 2002/0131062) is the same prior art reference as U.S. Serial No. 10/097,717, for which a Terminal Disclaimer has already been filed. Therefore, Neri et al. (U.S. 2002/0131062 or U.S. Serial No. 10/097,717) is no longer available as a prior art reference. Thus, the combination of Neri et al. (U.S. 2002/0131062), Usuki et al. and Rees cannot be maintained.

Moreover, in view of the amendment to claim 1, the prior art fails to teach a process of three-dimensional printing using radiation on multiple sides of an object where that are not in the same plane as the top of the object and where Surlyn is used as a carrier sheet for the dye image.

Since claim 7 is dependent on now allowable claim 1, applicant submits that claim 7 is now also allowable over the cited prior art.

B. Hastie et al. in view of Usuki et al., Rees and Durand

The office action states that claims 1, 2, 5, 6 and 7 are rejected under Section 103(a) as being unpatentable over the combination of Hastie et al. in view of Usuki et al., Rees and Durand. This cited prior art fails to teach a process of three-dimensional printing using radiation on multiple sides of an object where that are not in the same plane as the top of the object and where Surlyn is used as a carrier sheet for the dye image. Therefore, claim 1 distinguishes over the cited prior art.

Since claims 2, 5 and 7 are dependent on now allowable claim 1, applicant submits that these claims are now also allowable over the cited prior art. The rejection of claim 6 is now moot in view of the cancelation thereof.

C. Hastie et al. in view of Usuki et al., Rees, Durand and Williams

The office action states that claim 2 is rejected under Section 103(a) as being unpatentable over the combination of Hastie et al. in view of Usuki et al., Rees, Durand and Williams.

The cited prior art fails to teach a process of three-dimensional printing using radiation on multiple sides of an object where that are not in the same plane as the top

of the object and where Surlyn is used as a carrier sheet for the dye image and therefore cannot teach such a structure with an intermediate layer. Therefore, claim 2 distinguishes over the cited prior art.

Moreover, claim 2 is a dependent claim which is dependent on now allowable independent claim 1. Therefore, applicant submits that claim 2 is now allowable over the cited prior art.

D. Hastie et al. in view of Usuki et al., Rees, Durand and Narita

The office action states that claim 3 is rejected under Section 103(a) as being unpatentable over the combination of Hastie et al. in view of Usuki et al., Rees, Durand and Narita.

The cited prior art fails to teach a process of three-dimensional printing using radiation on multiple sides of an object where that are not in the same plane as the top of the object and where Surlyn is used as a carrier sheet for the dye image and therefore cannot teach such a structure with a dye-receptive layer that comprises a polymeric film-forming binder and pigment. Therefore, claim 3 distinguishes over the cited prior art.

Moreover, claim 3 is a dependent claim which is dependent on now allowable independent claim 1. Therefore, applicant submits that claim 3 is now allowable over the cited prior art.

E. Hastie et al. in view of Usuki et al., Rees, Durand and Gibbs et al.

The office action states that claim 4 is rejected under Section 103(a) as being unpatentable over the combination of Hastie et al. in view of Usuki et al., Rees, Durand and Gibbs et al.

The cited prior art fails to teach a process of three-dimensional printing using radiation on multiple sides of an object where that are not in the same plane as the top of the object and where Surlyn is used as a carrier sheet for the dye image and therefore cannot teach such a structure with a flexible membrane that includes silicone rubber. Therefore, claim 4 distinguishes over the cited prior art.

Moreover, claim 4 is a dependent claim which is dependent on now allowable independent claim 1. Therefore, applicant submits that claim 4 is now allowable over the cited prior art.

III. Conclusion

The present application has been amended in similar fashion to U.S. Patent No. 7,137,426 and U.S. Serial No. 11/276,624 (for which terminal disclaimers have already been filed) to distinguish over the prior art. Therefore, applicant submits that pending claims 1-5 and 7 herein are allowable over the cited prior art. In view of the above, Applicants submit that pending claims 1-5 and 7 are now in condition for allowance. Reconsideration of the Rejections and Objections are requested. Allowance of claims 1-5 and 7 at an early date is solicited.

If an extension of time is required for timely submission of this response, Applicant hereby petitions for an appropriate extension of time and the Office is

authorized to charge Deposit Account 02-0900 for the appropriate additional fees in connection with the filing of this response.

The Examiner is invited to telephone the undersigned should any questions arise.

Respectfully submitted,

/david r. josephs/

Dated: June 4, 2007

David R. Josephs
Registration No. 34,632
BARLOW, JOSEPHS & HOLMES, LTD.
101 Dyer Street, 5th Floor
Providence, RI 02903
Tel: 401-273-4446
Fax: 401-273-4447